

# **Biomass & Alternate Methane Fuels (BAMF) Experience**

### **EXPERIENCE**

- Annual savings of \$2.5 million
- Landfill Gas Generation Since 1988
- Over 70 MW of IPP Generation Utilizing Waste-Wood & Agricultural Byproducts
- Steam Reforming Demonstration Projects
- Extensive ESPC Experience
- Environmental Assessment and Compliance
- Comprehensive Approach to BAMF and Energy Conservation Projects
- Expertise in National Federal Contracts and Streamlining Processes
- Vendor Neutrality
- Utility Rate and Regulatory Experience
- Financing of Federal Projects

# **CONTACT INFORMATION**

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## **ALTERNATIVES AND COST SAVINGS FOR FEDERAL FACILITIES**

Constellation Energy Projects & Services (CEPS) was selected by the Department of Energy's (DOE) National Energy Technology Laboratory (NETL) to manage a national Biomass & Alternate Methane Fuels (BAMF) Energy Savings Performance Contract (ESPC) for Federal facilities worldwide. As a result, CEPS develops, finances and implements energy savings projects at qualified facilities in return for fixed payments from the cost savings of the projects. The payment terms are negotiated and the facility retains all remaining cost savings after the contract term expires.

These projects will assist federal agencies in meeting their renewable energy and energy savings mandates while reducing operating and maintenance costs. BAMF projects and related energy technologies will reduce federal energy consumption, conserve our traditional fuel sources, and reduce our dependence on foreign oil.

#### **CONSTELLATION ENERGY PROJECTS & SERVICES GROUP**

CEPS, a member of Constellation Energy, is a full service energy company that provides businesses and Federal Agencies with comprehensive and creative solutions to meet the diverse and vast energy needs of their respective facilities. CEPS utilizes its technical expertise to increase the efficiency and performance of Federal facilities with a focus on system requirements and agency mission.

After a thorough analysis of your operation, CEPS develops a customized action plan that provides the most reliable, practical solutions from both a technical and financial point of view. We partner only with vendors who have proven expertise at delivering top-quality products, competitively priced. Furthermore, our strong relationships and extensive experience with a variety of financing resources—banks, government sources, leasing companies and private investment pool—offer you a number of financing options from which to choose.

CEPS is your full service partner for energy-related products and services. Our energy experts are prepared to develop and follow-through on a custom-made plan to maximize your efficiency and reduce costs for your unique facility and requirements.

# BAMF SUPER ESPC FACTS FOR FEDERAL FACILITIES

- Reduces Energy Costs Through the Use of Renewable Energy
- Conserves Traditional Fuel Sources, Reducing Our Dependence on Foreign Oil
- Assists with Goals Established by E.O. 13123, "Greening the Government Through Efficient Energy Management"
- Integral to Meeting E.O. 13134,
   "Developing and Promoting Biobased Products and Bioenergy"
- Can Integrate other Energy Conservation Projects with BAMF Projects
- Variety & Transportability of Biomass Materials Makes Potential Opportunities Nearly Limitless
- Tech-Specific Super ESPC's are Proven and Recommended Contract Vehicles for Federal Facilities
- Minimizes Risks of Volatile Energy Prices
- Provides Facility Improvements without Capital Appropriations
- Minimizes Maintenance Costs for Utility and Energy Consuming Systems
- A BAMF Project is NOT a New Technology, It's a New Source of Fuel

### **SUPER ESPC REFERENCE PROJECT**

# **Aberdeen Proving Grounds**

# **Geothermal Heat Pumps**

Project Scope: Installation of 643 geothermal heat pump systems for military family housing. These new systems also included the installation of de-super heaters to the existing Domestic Hot Water Heaters in each unit to further add additional energy savings to the project. The project was entirely paid for out of the annual energy savings. CEPS will maintain, repair, and guarantee the performance of the entire system for 20 years.

# **BIOMASS REFERENCE PROJECT**

Constellation's Rio Bravo Rocklin Power Station
25 MW Biomass—Wood Waste & Agricultural Byproducts Plant

Project Scope: 25 MW power station placed into commercial operation in 1989, required to operate as a Qualifying Facility (QF) in accordance with the requirements of PURPA. The steam generator for this station features a circulating fluidized bed boiler design, which was designed to burn biomass, primarily wood waste and agricultural byproducts. Energy is generated by a single 28,000 kW, 12.47 kV generator and the voltage stepped up so it can be connected to the Pacific Gas & Electric (PG&E) grid. Financially, the project receives revenues through its Power Purchase Agreement (PPA) with PG&E that includes both capacity and energy fees. The term of the PPA is 30 years and extends through 2019.

Constellation Energy Projects & Services Group is a full-service energy consultant, providing customized energy solutions exclusively to government and large commercial and industrial customers. Applying superior energy knowledge, engineering expertise, new technologies and proven procurement mechanisms to a variety of energy challenges, Constellation Energy Projects & Services Group serves clients with single and multiple locations throughout North America. The company's extensive array of products and services—utility infrastructure outsourcing (electricity, chilled water, heating), mechanical/electrical upgrades, utility data mining, and performance contracting—are all designed to increase energy efficiency, reliability, cost effectiveness and savings. Its Constellation Building Systems division provides services that include building control systems, mechanical construction, and equipment retrofits.

Constellation Energy Projects & Services Group is a member of Constellation Energy (www.constellation.com), a Fortune 200 company whose combined revenues in 2004 totaled \$12.5 billion.